

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions in the application:

1. (Previously presented) A switching apparatus arranged to receive data signals on a main transmission path and at least one stand-by transmission path, each path carrying, in use, a substantially identical data signal, and to output data from a selected one of said transmission paths, each data signal being comprised of data frames, each data frame comprising at least one data element, the apparatus including a selector mechanism for selecting between transmission paths, wherein each data element is associated with an identifier that identifies to which data frame it belongs, the apparatus being arranged to align the respective data signals received on said transmission paths by causing said selector mechanism to select between transmission paths by selecting between a respective data element from each path wherein the associated identifiers of said respective data elements indicate that said respective data elements belong to the same data frame.
2. (Original) An apparatus as claimed in Claim 1, wherein said signal alignment is achieved by buffering the received data signals.
3. (Cancelled)
4. (Previously presented) An apparatus as claimed in Claim 1, wherein the selector mechanism is arranged to cause said output data to comprise said selected elements in sequential order according to the positional information indicated by the respective tags.
5. (Previously presented) An apparatus as claimed in Claim 1, wherein said selector mechanism is arranged to select between corresponding signal elements on a frame-by-frame basis.

6. (Original) An apparatus as claimed in Claim 1, wherein said signal elements comprise data containers.

7. (Previously presented) An apparatus as claimed in Claim 4, wherein said identifiers comprise virtual concatenation overhead bits.

8. (Previously presented) An apparatus as claimed in Claim 1, wherein said selector mechanism is arranged to compare the quality of said respective data elements and to select the transmission path associated with the data element of better quality.

9. (Original) An apparatus as claimed in Claim 2, wherein the apparatus is arranged to store the elements of each received data signal in a respective data buffer.

10. (Original) An apparatus as claimed in Claim 9, wherein the data buffers are implemented in one or more memory devices.

11. (Original) An apparatus as claimed in Claim 9, wherein the data buffers are implemented in Random Access Memory (RAM).

12. (Previously presented) An apparatus as claimed in Claim 9, wherein the selector mechanism comprises a switching controller arranged to select between transmission paths, and a switch device arranged to retrieve at least one signal elements from the data buffer corresponding to the selected transmission path and to cause said at least one retrieved signal element to be output.

13. (Original) An apparatus as claimed in Claim 12, wherein the switching controller is arranged to select between transmission paths in respect of each signal element.

14. (Original) An apparatus as claimed in Claim 13, wherein the switching controller is arranged to compare the quality of corresponding respective signal elements from each received data signal and to cause the switch device to retrieve the signal element having better quality.

15. (Original) An apparatus as claimed in Claim 12, wherein the switch device comprises a memory reading device.

16. (Original) An apparatus as claimed in Claim 1, wherein the apparatus is arranged to store information concerning the quality of at least one element of each received data signal.

17. (Original) An apparatus as claimed in Claim 1, being arranged for use in a synchronous transmission system.

18. (Currently amended) A synchronous transmission apparatus comprising a switching apparatus ~~as claimed in Claim 1~~, arranged to receive data signals on a main transmission path and at least one stand-by transmission path, each path carrying, in use, a substantially identical data signal, and to output data from a selected one of said transmission paths, each data signal being comprised of data frames, each data frame comprising at least one data element, the apparatus including a selector mechanism for selecting between transmission paths, wherein each data element is associated with an identifier that identifies to which data frame it belongs, the apparatus being arranged to align the respective data signals received on said transmission paths by causing said selector mechanism to select between transmission paths by selecting between a respective data element from each path wherein the associated identifiers of said respective data elements indicate that said respective data elements belong to the same data frame.

19. (Currently amended) A synchronous transmission system comprising a first synchronous transmission apparatus arranged to transmit data signals across a network on at least two transmission paths, each data signal being comprised of data frames, each data frame comprising at least one data element; and a second synchronous transmission apparatus arranged to receive said data signals on said at least two paths, wherein the first synchronous transmission apparatus is arranged to associate each element of each transmitted data signal with an identifier that identifies to which data frame it belongs, and wherein said second synchronous transmission apparatus comprises a switching apparatus ~~according to Claim 1~~ arranged to receive data signals on a main transmission path and at least one stand-by transmission path, each path carrying, in use, a substantially identical data signal, and to output data from a selected one of said transmission paths, each data signal being comprised of data frames, each data frame comprising at least one data element, the apparatus including a selector mechanism for selecting between transmission paths, wherein each data element is associated with an identifier that identifies to which data frame it belongs, the apparatus being arranged to align the respective data signals received on said transmission paths by causing said selector mechanism to select between transmission paths by selecting between a respective data element from each path wherein the associated identifiers of said respective data elements indicate that said respective data elements belong to the same data frame.

20. (Previously presented) A method of switching between transmission paths in a switching apparatus arranged to receive data signals on a main transmission path and at least one stand-by transmission path, each path carrying, in use, a substantially identical data signal, and to output data from a selected one of said transmission paths, each data signal being comprised of data frames, each data frame comprising at least one data element, the method comprising selecting between transmission paths by selecting between a respective data element from each path wherein the associated identifiers of said respective data elements indicate that said respective data elements belong to the same data frame.

21. (Previously presented) A method of switching between transmission paths in a synchronous transmission system comprising a first synchronous transmission apparatus arranged to transmit data signals across a network on at least two transmission paths each data signal being comprised of data frames, each data frame comprising at least one data element; and a second synchronous transmission apparatus arranged to receive said data signals on said at least two paths, the method comprising: associating, at said first synchronous transmission apparatus, an identifier with each element of said data signals, the identifier indicating to which frame the data element belongs; selecting, at said second synchronous transmission apparatus, between transmission paths by selecting between a respective data element from each path wherein the associated identifiers of said respective data elements indicate that said respective data elements belong to the same data frame; and outputting said selected signal elements in sequential order according to the information indicated by the respective identifiers.

22. (Previously presented) An apparatus as claimed in Claim 1, wherein said identifiers comprise Virtual Concatenation overhead bits.